

REMARKS

Claims 1-16 and 18-55 are pending and at issue in this application. This paper is being presented in response to the non-final Office Action dated April 9, 2007.

Applicants respectfully traverse the rejection of claims 1-6, 8-16, 18-21, 23-44, and 46-55 under 35 U.S.C. §103(a) as obvious over Spriggs et al., U.S. Patent No. 6,421,571 ("Spriggs") in view of Shimizu et al., U.S. Pat. No. 6,665,635 ("Shimizu"), further in view of Thibault et al., U.S. Patent No. 6,799,195 ("Thibault"), and respectfully traverse the rejection of claims 7, 22 and 45 under 35 U.S.C. §103(a) as obvious over Spriggs in view of Shimizu, further in view of Thibault and Hays et al., U.S. Patent No. 5,855,791 ("Hays"). Reconsideration and withdrawal of the rejections of claims 1-16 and 18-55 are respectfully requested in view of the following remarks.

Independent claims 1, 16, 27, and 37 have been amended by the present amendment. Support for the amendment is found at least in Figures 18, 19, 21-23, 28-31, 32, and 33, and paragraphs 13, 57, 58, and 138 of the published application. Thus, no new matter is added.

I. The Pending Claims Recite Patentable Subject Matter Over the Cited Art

Each of the pending claims stands rejected under 35 U.S.C. §103(a) as obvious over Spriggs, in view of Shimizu, and further in view of Thibault or over Spriggs, in view of Shimizu, and further in view of Thibault and Hays. Independent claims 1, 26, 27, and 37 are amended by the present amendment. Reconsideration and withdrawal of these rejections are respectfully requested, as the applicants submit that the examiner has not established a *prima case* of obviousness. The applicants accordingly traverse the art-based rejections on at least the following grounds.

As set forth in MPEP §2142, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all of the claim limitations.

None of Spriggs, Shimizu, Thibault, and Hays, alone or in combination, teach or suggest all of the claim limitations

None of Spriggs, Shimizu, Thibault, and Hays, alone or in combination, teach or suggest all of the claim limitations of independent claims 1, 16, 27 and 37. It is noted that the Examiner has not cited Hays in the rejection of independent claims 1, 16, 27 and 37. Applicants have, however, put forth arguments with regard to Hays for the record.

Each of amended independent claims 1, 16, 27 and 37 requires, *inter alia*, that data is collected, stored and/or made accessible or available to a plurality of applications, including a “**remotely implemented service application configured to remotely**” “**access**” or **provide** the “**subsidiary device data**,” as recited in each of claims 1, 16, 27, and 37. By this amendment, the claims have been amended to clarify that the service provider performs the **remotely implemented** service application that has access to **subsidiary device data** which is accessed remotely from the process plant to more clearly distinguish the *type of data* that is accessed remotely from the process plant and the *type of service application* that has access to the plant data. In any event, the claimed methods and systems use an application implemented by a third party service provider remotely from the process plant to access data including the **subsidiary device data** and incorporate this application into the data collection and distribution system as if this application were an internal application implemented on the assets or computers of the process control plant so that **subsidiary device data** made available to the internal applications is also made available to the remotely implemented third party application, and so that **subsidiary device data** produced by the remotely implemented third party application is also made available to internal applications within the plant via a common data storage and distribution system.

Subsidiary device data generally includes data about devices that are not used to provide on-line process control. Such data includes for example performance, health, variability, and utilization data, etc. (see paragraph 53 of the published

application) of any device as shown in Figure 1 or as described in paragraph 138 of the published application.

Thus, the claimed methods and systems collect data including *subsidiary device data* from a plurality of data sources and provide the collected *subsidiary device data* to a number of applications, including the remote third party service provider application and, in addition, collect *subsidiary device data* generated by the remote service provider application and store that *subsidiary device data* so as to make that additional data available to other applications within the process plant, such as to process control applications and maintenance applications implemented within the process plant.

None of Spriggs, Shimizu, Thibault, and Hays, alone or in combination, discloses or suggests a system that integrates a third party application implemented remotely by a third party service provider in a manner in which *subsidiary device data* is provided externally by the “*remotely implemented service application configured to remotely*” “*access*” or *provide the “subsidiary device data”* as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37.

In particular, while Spriggs discloses a data collection system that provides sensor data to “third party” software (see element 60, Fig. 3), each of these “third party” software applications is clearly implemented within the process plant environment itself, and receives data directly from the sensors 70 of the process plant. As admitted by the examiner, Spriggs fails to disclose any manner of incorporating a third party application that is implemented remotely from the process plant into the data collection and viewing system described therein. (See, Final Office Action dated September 28, 2006, page 3, paragraph 6.) Moreover, Spriggs specifically indicates that it only incorporates third party machines and process control applications *within* the plant. Thus, for example, the Spriggs system specifically “gather[s] information from multiple information sources *within* the plant control and automation systems and synchronously integrat[es] the information onto a single unified display environment.” (Emphasis added, Spriggs, column 2, lines 34-38). Spriggs simply provides no disclosure of a “*remotely implemented service application configured to*

remotely” “*access*” or *provide the “subsidiary device data”* as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37.

To this point, the applicants specifically disagree with the examiner’s reading of col. 2, lines 12-39 of Spriggs as disclosing the concept of collecting data from a plurality of data sources in a process plant wherein the plurality of data sources includes a service application that is implemented by a service provider to the process plant. At no point does this or any other section of Spriggs disclose that a third party implements applications for the process plant of Spriggs. At best, this section discloses that third party applications or software could be used within the plant and that the plant can communicate with these third party applications using known types of interfaces. This is not the same as disclosing that a third party actually implements the software within the plant. In fact, using an application or software created by a third party within a process plant is much different than having a third party actually implement a “*remotely implemented service application configured to remotely*” “*access*” or *provide the “subsidiary device data”* as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37.

Still further, applicants disagree with the examiner’s contention that col. 6, line 49 to col. 7, line 25 of Spriggs discloses making stored data collected within the process plant accessible to a third party service application. This disclosure is specifically related to the utilities modules 200 and to the data explorer modules 300 of Fig. 3. While the utilities module 200 includes software modules, the software modules are used to increase communication abilities and functionality within the system and, specifically, are used to communicate with third party applications run *within* the plant as shown in the Fig. 3. Likewise, the data explorer modules are interfaces that allow the system to communicate with third party control and automation systems, which control and automation systems must be located within the plant, via known interfaces.

Thus, Spriggs does not describe or disclose the “*remotely implemented service application configured to remotely*” “*access*” or *provide the “subsidiary device data”* as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37.

With respect to Shimizu, Shimizu is directed toward a method for providing power plant maintenance services where *plant data* along with *data concerning the controlling controller 11's* status is bidirectionally transferred between a remote maintenance device 3 and a maintenance tool 2 . (see Shimizu Fig. 1 and 3) The remote maintenance device 3 of Shimizu is not a ***“remotely implemented service application configured to remotely” “access” or provide “subsidiary device data”*** as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37. Rather, the remote maintenance device 3 of Shimizu has access to *“plant data along with data concerning the controlling controller 11's status via a communications line 8 between the maintenance tool 2 and the remote maintenance device 3 to thereby provide maintenance services of the thermal power plant of interest.”* (Shimizu, Abstract) *Plant data* is data is data concerned with the overall plant operations which are described in Figures 5, 6, 7, 9, 10, and 11 of Shimizu. In these figures, Shimizu describes plant data such as “load, water feed, fuel, air, mst (fuel up), msp (fuel up), rst.” Shimizu does not offer further explanation of this data. Accordingly, Shimizu does not describe or disclose the ***“remotely implemented service application configured to remotely” “access” or provide “subsidiary device data”*** as claimed.

Moreover, all of the other data Shimizu describes is *data concerning the controlling controller 11's* status and not ***“subsidiary device data”*** as claimed. Shimizu describes this *data concerning the controlling controller 11's* status as “error log information as saved within the controlling controller 11 via the unit network 7 and transfer device 24 in the event that a certain operation failure or obstruction takes place *in the controlling controller 11.*” (Shimizu, col. 4, lines 19-24) Further, Shimizu describes the data items that its remote maintenance device 3 acquires as data items such as “process signal data, control signal data, controlling controller error log, controlling controller object data, control parameters, etc.) that the maintenance tool 2 has received from the control device 1.” (Shimizu, col. 4, lines 39-47) This data is concerned with the controller and not with any type of ***“subsidiary device data”*** as claimed. In other words, Shimizu transfers data that is either about the controller or the plant data as a whole and not ***“subsidiary device data”*** as claimed.

Accordingly, Shimizu does not describe or disclose the “*remotely implemented service application configured to remotely*” “*access*” or *provide the “subsidiary device data”* as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37.

Similar to Shimizu, Thibault is directed toward “monitor[ing] and/or control[ing] the process *control* apparatus via [communications over the network].” (Thibault, Abstract) Figure 2 of Thibault does not describe a “*remotely implemented service application configured to remotely*” “*access*” or *provide “subsidiary device data”* as claimed. Rather, Thibault sheds light into the type of data it transfers when it describes its intended purpose of enabling remote access for a number of purposes which are described as monitoring *plant processes* and gaining remote access to a *plant’s* control/sensing device. (see Thibault, col.1, lines 59-65) This object along with its other intended purpose of providing improved methods and apparatus for *process* control, (see Thibault, col.1, lines 66-67) would lead a person with ordinary skill in the art to conclude that the communications over the internet involve *process control* data rather than “*subsidiary device data*” as claimed. Thibault does not go into further detail of the communications over the network.

Accordingly, Thibault does not describe or disclose the “*remotely implemented service application configured to remotely*” “*access*” or *provide the “subsidiary device data”* as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37.

With respect to Hays, Hays is directed toward a performance based control system which does not describe any “*subsidiary device data*” as claimed, much less a “*remotely implemented service application configured to remotely*” “*access*” or *provide the subsidiary device data* as claimed. Further, Hays, like Shimizu, and Thibault, teaches controlling *system* or overall *plant* parameters by use of *system* or overall *plant* data. (see Hays, col. 6, lines 42-50) In particular, Hays “utilizes fouling and corrosion measurements to adjust operating parameters to the deleterious effects of both and to assure optimization of cooling *system* performance.” (Hays, col. 6, lines 42-50) Further, Hays describes “methods of monitoring characteristics of cooling systems and controlling parameters of the systems.” (Hays, col. 4, lines 17-

19) Such system performance data and parameters are not “*subsidiary device data*” as claimed. Thus, Hays is further distinguished from the claimed limitations.

Accordingly, Hays does not describe or disclose the “*remotely implemented service application configured to remotely*” “*access*” or *provide the “subsidiary device data”* as claimed in combination with the other respective limitations in each of claims 1, 16, 27, and 37.

For these reasons, it is respectfully submitted that a *prima facie* case of obviousness has not been and cannot be established based on any combination of Spriggs, Shimizu, Thibault, and Hays. It follows therefore that claims 1-16 and 18-55 recite patentable subject matter over any combination of these documents.

II. Conclusion

For the foregoing reasons, the applicants respectfully request reconsideration and allowance of claims 1-16 and 18-55. If there are matters that can be discussed by telephone to further the prosecution of this application, the applicants respectfully request that the examiner call their attorney at the number listed below.

Respectfully submitted,

By:



Roger A. Heppermann
Registration No.: 37,641
MARSHALL, GERSTEIN & BORUN LLP
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6402
(312) 474-6300 (phone)
(312) 474-0448 (fax)

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